

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

5.1 Research Conclusions

The objective of this research is to test whether companies engage in income decreasing earnings management during global financial crisis or not. This study uses data on a sample of 154 manufacturing companies listed on the Indonesia Stock Exchange 2008-2009 period and meets the criteria.

This research used Modified Jones model to determine earnings management and one sample t-test (one-tailed test) to test the hypothesis. Results of analysis of the study show that hypothesis null is accepted. It means that companies do not engage in income decreasing earnings management during global financial crisis 2008-2009. It could happen because companies have several motivations and considerations in earnings management.

5.2 Research Limitations

This research has limitation, which is short period of observations and limited samples. This research only observed earnings management in 2008-2009 due to the crisis only occurred in that period. So, the period of observations can not be extended. Besides that, Modified Jones model, which is being used in this research, is best used for manufacturing companies.

Therefore, this research only used the samples from manufacturing companies.

5.3 Suggestion for Future Research

Suggestion that could be given for future research is to combine with the other crises events. Here, the meaning of combine is by using several crises events as sample, for instance Asian financial crisis in 1998 and Persian Gulf crisis. So, a research about earnings management can be conducted by comparing earnings management during Asian financial crisis, Persian Gulf crisis, and global financial crisis 2008-2009. As long as the data is available and freely accessible, future research about the other crises can be conducted.

Therefore, in the future, researcher can use several crises events together and combine them in his/her research for better understanding of earnings management during financial crisis (but it depends on the availability of the data).

Appendix 1: Lists of Samples

No	Symbol	Name
1	SMCB	Holcim Indonesia Tbk
2	INTP	Indocement Tungal Prakasa Tbk
3	SMGR	Semen Gresik (Persero) Tbk
4	ARNA	Arwana Citramulia Tbk
5	MLIA	Mulia Industrindo Tbk
6	TOTO	Surya Toto Indonesia Tbk
7	BTON	Betonjaya Manunggal Tbk
8	CTBN	Citra Tubindo Tbk
9	INAI	Indal Aluminium Industry Tbk
10	JKSW	Jakarta Kyoei Steel Works Tbk
11	JPRS	Jaya Pari Steel Tbk
12	LION	Lion Metal Works Tbk
13	LMSH	Lionmesh Prima Tbk
14	PICO	Pelangi Indah Canindo Tbk
15	BUDI	Budi Acid Jaya Tbk
16	DPNS	Duta Pertiwi Nusantara Tbk
17	EKAD	Ekadharma International Tbk
18	ETWA	Eterindo Wahanatama Tbk
19	SRSN	Indo Acidatama Tbk
20	AKPI	Argha Karya Prima Ind. Tbk
21	APLI	Asiaplast Industries Tbk
22	BRNA	Berlina Tbk
23	DYNA	Dynaplast Tbk
24	IGAR	Kageo Igar Jaya Tbk
25	TRST	Trias Sentosa Tbk
26	JPFA	JAPFA Comfeed Indonesia Tbk
27	SIPD	Sierad Produce Tbk
28	SULI	Sumalindo Lestari Jaya Tbk
29	FASW	Fajar Surya Wisesa Tbk
30	SPMA	Suparma Tbk
31	SAIP	Surabaya Agung Industry Pulp Tbk
32	AUTO	Astra Otoparts Tbk
33	GJTL	Gajah Tungal Tbk
34	GDYR	Goodyear Indonesia Tbk
35	INDS	Indospring Tbk
36	LPIN	Multi Prima Sejahtera Tbk
37	MASA	Multistrada Arah Sarana Tbk
38	PRAS	Prima Alloy Steel Tbk
39	SMSM	Selamat Sempurna Tbk

40	MYTX	Apac Citra Centertex Tbk
41	ARGO	Argo Pantes Tbk
42	ESTI	Ever Shine Textile Industry Tbk
43	MYRX	Hanson International Tbk
44	KARW	Karwell Indonesia Tbk
45	PBRX	Pan Brothers Tex Tbk
46	PAFI	Panasia Filament Inti Tbk
47	RICY	Ricky Putra Globalindo Tbk
48	BIMA	Primarindo Asia Infrastructur Tbk
49	BATA	Sepatu Bata Tbk
50	SIMM	Surya Intrindo Makmur Tbk
51	KBLM	Kabelindo Murni Tbk
52	IKBI	Sumi Indo Kabel Tbk
53	PTSN	Sat Nusapersada Tbk
54	ADES	Akasha Wira International Tbk
55	AISA	Tiga Pilar Sejahtera Food Tbk
56	AQUA	Aqua Golden Mississippi Tbk
57	CEKA	Cahaya Kalbar Tbk
58	HMSP	HM Sampoerna Tbk
59	INAF	Indofarma Tbk
60	INDF	Indofood Sukses Makmur Tbk
61	KAEF	Kimia Farma Tbk
62	KDSI	Kedawung Setia Industrial Tbk
63	KICI	Kedaung Indah Can Tbk
64	KLBF	Kalbe Farma Tbk
65	LMPI	Langgeng Makmur Industri Tbk
66	MERK	Merck Tbk
67	MLBI	Multi Bintang Indonesia Tbk
68	MRAT	Mustika Ratu Tbk
69	MYOR	Mayor Indah Tbk
70	PSDN	Prasidha Aneka Niaga Tbk
71	PYFA	Pyridam Farma Tbk
72	RMBA	Bentoel International Investama Tbk
73	SCPI	Schering-Plough Indonesia Tbk
74	SKLT	Sekar Laut Tbk
75	SQBI	Taisho Pharmaceutical Indonesia (PS) Tbk
76	STTP	Siantar Top Tbk
77	TCID	Mandom Indonesia Tbk
78	TSPC	Tempo Scan Pacific Tbk
79	ULTJ	Ultra Jaya Milk Tbk
80	UNVR	Unilever Indonesia Tbk

Appendix 2: Data 2008 (in Rupiah)

No	Name	T/It	Ait-I	ΔREVit	ΔRECit	PPEit	DAit
1	SMCB	-896161000000	720825000000	1586148000000	156412000000	5831892000000	0,013
2	INTP	126298803995	10016027529358	2456852520566	88666214331	7597621854686	0,139
3	SMGR	-104763104000	8515227431000	2609045408000	343230069000	3308878167000	0,044
4	ARNA	-36879947614	630587291741	140145626832	34582269185	486692070108	0,074
5	MLIA	-1026641709000	3822944317000	570825068000	46981082000	1905249467000	-0,185
6	TOTO	-121612790529	931995368437	229084894169	43485340975	409195460036	-0,061
7	BTON	-291927407	46469199037	57188007120	-6517227780	8785493039	-0,050
8	CTBN	10320697	169982456	24140623	-8335524	41222057	0,094
9	INAI	-13164382889	482711646072	127963990577	36874499403	37888015935	-0,024
10	JKSW	-56666961411	290139653820	58771406790	-20892825101	47166537722	-0,181
11	JPRS	-67737370677	268790167421	299895419422	144916442112	18549162154	-0,272
12	LION	9300806027	216129508805	50038581707	-3182566435	18837324480	0,045
13	LSMH	-297308998	62812399313	46079916421	502099891	9185182349	-0,019
14	PICO	56734604149	452880149487	264030153093	9979965099	227480570180	0,186
15	BUDI	-47011000000	1485651000000	201689000000	-112271000000	971180000000	0,077
16	DPNS	14295432558	156052451747	11935399333	-12199976671	13709494874	0,099
17	EKAD	61713638390	84926214500	35737714060	-514992984	12324769748	0,729
18	ETWA	596157860128	439545959118	293508054698	339450320391	7089668242	1,365
19	SRSN	-17257928000	334128209000	45840511000	11987486000	108742114000	0,002
20	AKKU	-9140109076	53884736781	-14992535617	-3935165489	28492616091	-0,061
21	AKPI	-87843787000	1544670126000	247764188000	7848230000	829145864000	0,033
22	APLI	-42656950891	197303822271	107812117445	-11755735061	194493973397	-0,069
23	BRNA	3540713690	387272984910	103993137337	23732285104	199933558336	0,092
24	DYNA	-160383686749	1123388423766	242918242620	5038804705	720857754530	-0,037
25	IGAR	-33669997594	329796879167	308717808	11812232305	59157723781	-0,069

No	Name	TAit	Ait-1	AREV'it	ΔREC'it	PPEit	DAit
26	TRST	-71335680437	2138990664786	314378517283	-51940109361	1382186804500	0,076
27	JPFA	302295000000	4043497000000	4762366000000	2644040000000	1683150000000	0,088
28	SIPD	78218120807	1294772758402	699232717742	44898174335	479497193994	0,100
29	SULI	-262154149499	1895845309043	23188054312	-190002152147	1321401054649	-0,011
30	FASW	-1071395101091	3769588379462	371217475245	-4294112552906	2620337693858	-0,227
31	SPMA	-36980778667	1501891918564	222131955074	25196029602	1072579690895	0,099
32	SAIP	-446853036825	2661804433725	189925126212	-16895251498	2284338698551	-0,014
33	AUTO	48946000000	3454254000000	1072940000000	-116843000000	702097000000	0,032
34	GIJL	-119588000000	8454693000000	1303619000000	-175220000000	3618630000000	-0,073
35	GDYR	45373776000	579661339000	155657271000	-27055145000	548290062000	0,234
36	INDS	66757676863	243335465502	398757336789	64891096471	206098188593	0,352
37	LPIN	31072437725	139252657007	10095377986	3318827202	1378301797	0,222
38	MASA	-123306000000	1799172358609	435269134475	45789057180	1622044000000	0,085
39	SMSM	-39223324963	830049538892	289530991132	36559610840	358494769438	0,015
40	MYTX	-148545781944	2335428400624	-687362304442	-105565100332	1407852711035	0,062
41	ARGO	-169046506000	1866001471000	46406206000	-46468565000	1284509455000	0,033
42	ESTI	-81384797942	540721878346	61608541073	-12078743352	166243668470	-0,102
43	MYRX	-24892733361	524778161505	-288196143968	-43703806710	25158910	-0,448
44	KARW	-68187391645	302516741069	-62337908804	-66398700077	22287899181	-0,213
45	PBRX	16207982750	833092974381	134644389715	-22590276718	223328550332	0,058
46	PAFI	-147940709596	606247976205	-60762425799	-16728771625	385940941346	-0,123
47	RICY	9932760884	574676517444	65199121810	33119853141	187258219047	0,074
48	BIMA	-23158776715	97176841549	47662024482	-4540955214	21808543262	-0,228
49	BATA	194235693000	332080232000	46045002000	-4569668000	144055362000	0,656
50	SIMM	-46305539974	117679481007	-86424450748	-7273915267	40003339284	-0,293
51	KBLM	41080812704	432681409048	220086091517	17867263643	240338185928	0,171

No	Name	TAit	Ait-1	ΔREVit	ΔRECit	PPeIt	DAit
52	IKBI	29370011167	589322195547	54871524958	11071630239	122328448630	0,084
53	PTSN	-61296570922	799538391435	506840897377	81303099750	447254351357	-0,004
54	ADES	33306000000	178761000000	-2007000000	-525000000	124311000000	0,315
55	AISA	-15210453008	515609051582	-10698808842	2590629141	559524386372	0,172
56	AQUA	-41426000000	891529586396	379376903179	65759138571	332516000000	0,002
57	CEKA	68891839293	613679506628	1151002147767	97402184745	185987603192	0,070
58	HMSF	-849833000000	15680542000000	4892720000000	-291637000000	432950600000	-0,022
59	INAF	192339203728	1009437678208	205422776231	-35212475403	89228325975	0,193
60	INDF	-1650417000000	29527460000000	10940975000000	393151000000	9586545000000	-0,017
61	KAEF	77474097046	1386739149721	339092507858	-35140634421	397948186334	0,093
62	KDSI	-5749292352	542059955501	155466093413	-35806099292	187338266136	0,033
63	KICI	3902685343	80262032305	29130884018	-301110117552	5331348180	-0,174
64	KLBF	-100878389154	5138212506980	872456533725	74087356663	1327346591354	0,019
65	LMPI	12161160703	531756407354	23015724365	6139990787	166689422871	0,079
66	MERK	-5113430000	331062225000	89896086000	2451299000	54794578000	0,000
67	MLBI	-192906000000	621835000000	347061000000	-4389000000	403172000000	-0,223
68	MRAT	-8140756625	315997722658	55681431215	22996825563	58481329894	0,002
69	MYOR	57777062540	1893175019860	1079234021590	165626115215	1030724975463	0,103
70	PSDN	-73390591020	291723051005	113053556931	-29369693832	117341306488	-0,205
71	PYFA	1572334921	95157347340	32937953932	2714293041	56679610907	0,108
72	RMBA	294235788585	3859160327022	1354794400972	-34580506159	1040992186452	0,105
73	SCPI	15651388000	128565403170	33660628391	3805930328	35182452000	0,159
74	SKLT	-8490501306	182697462917	76075101388	-2316614792	91598130430	0,021
75	SQBI	-18030528000	227421924000	98690404000	16847853000	70106365000	-0,043
76	STTP	14596011703	517448084688	2407050563694	8623163022	325176639144	0,142
77	TCID	13494435643	725197057770	221441821492	37580653530	386987364586	0,102

No	Name	TAit	Ait-1	ΔREVit	ΔRECit	PPEit	DAit
78	TSPC	28351818152	2773134866559	509716588836	46294969205	665063282472	0,045
79	ULTJ	172872440105	1362829538011	235806662056	-11372526473	766344567479	0,220
80	UNVR	-378554000000	5333406000000	3032910000000	222749000000	2559875000000	-0,013

Data 2009 (in Rupiah)

No	Name	TAit	Ait-1	ΔREVit	ΔRECit	PPEit	DAit
1	SMCB	-647114000000	8208985000000	602827000000	13500000000	5460935000000	0,043
2	INTP	-437767551933	11286706863779	795960018503	429528524905	7773276914092	0,096
3	SMGR	-920009694000	12951308161000	2178003749000	-76806128000	401414332000	-0,042
4	ARNA	-24097133764	736091719029	66936777344	1454580158485	601648997664	0,512
5	MLJA	893623704000	3740646458000	-182011353000	-214173656000	1690584778000	0,330
6	TOTO	-44706903264	1031130721298	-144020229926	8991269947	393618618260	0,065
7	BTON	-1433118074	70508814577	-39280018780	1157699598	7094322789	0,115
8	CTBN	-11018845	190763432	-66186946	-2674910	56021623	0,069
9	INAI	-97191402937	622405086863	-171368935843	-33733440676	31871721634	-0,101
10	JKSW	-34040163892	300344857854	15597316302	-54878832719	47356826124	-0,128
11	JPRS	11543598865	399343736262	-429834903836	-46275592153	19191931767	0,231
12	LJON	-16843061557	253141852363	-32099165701	336093535887	19613637506	0,240
13	LMSH	-5609112425	61987805413	-38505945169	3292807722	24185809936	0,124
14	PICO	-14074248567	588563565451	6980029394	-20973230907	219737979541	0,043
15	BUDI	-93007000000	1698750000000	230145000000	42185000000	1054857000000	0,050
16	DPNS	-13157105562	142627256412	-19391711347	-13776667623	11171935169	-0,068
17	EKAD	22011597671	140763761567	22568440303	3064620478	66641467151	0,226
18	ETWA	11442160190	417548675139	50611562996	-76562060571	20062757476	-0,024

No	Name	TAt	Ait-1	ΔREV'it	ΔRECit	PPe'it	DAit
19	SRSN	51961170000	392937045000	38624162000	5101119000	100334635000	0,168
20	AKPI	-112919420000	1644229905000	-204586123000	-67006864000	748562284000	0,041
21	APLI	-9340652765	276082674266	-16246971199	10229342108	187461988513	0,125
22	BRNA	-6823030854	432191714490	57208088583	40602501186	214233768452	0,078
23	DYNA	-114119343378	1235004262542	109992193820	19936391753	744671741429	0,017
24	IGAR	-4653673708	305782633658	31625546151	15976531413	49756561784	0,008
25	TRST	-171490510101	2158865645281	-239408867405	-27821660618	1310043546298	0,065
26	JPFA	130194000000	5774844000000	1674596000000	58718000000	1804730000000	0,031
27	SIPD	44291113956	1384992127001	910864492307	105721206925	647320130771	0,012
28	SULI	-47082543560	2169944583777	-429778673271	109263926486	1240894650453	0,145
29	FASW	-591411355447	3718547929224	-293712362125	123815356725	2550452554913	0,004
30	SPMA	-52398966300	1564901725746	-17816177042	-10853268699	1037308665644	0,103
31	SAIP	331856948199	2523434393139	-400239136369	11521101800	2190105457923	0,342
32	AUTO	172520000000	3981316000000	-12417000000	148266000000	696716000000	0,087
33	GJTL	-232075000000	8713559000000	-27041000000	174650000000	3609236000000	0,063
34	GDYR	-268306087000	1022329205000	48300104000	6551111000	695737001000	-0,131
35	INDS	-137769273964	918227729873	-242969383912	-67178493196	183494257296	-0,071
36	LPIN	8983096260	182939871224	-1160738064	22652144453	711290210	0,076
37	MASA	-58690000000	2379024000000	357871000000	20695000000	1692561000000	0,115
38	PRAS	-36424557511	555320858382	-249471600894	-81794018277	153641418794	0,052
39	SMSM	-135220141780	929753183773	21065519918	34681316455	341364253389	-0,067
40	MYTX	162651463535	2176057225106	-420079049178	-45470308932	1273909526675	0,229
41	ARGO	-18040326000	1724241351000	-336818830000	-42937928000	1204028284000	0,167
42	ESTI	-41672476519	530247658720	-29312443982	17037521568	211759208326	0,021
43	MYRX	14912972671	2232250218	0	-1275621193	18197770	6,568
44	KARW	-21596282116	152433874007	-207162703199	-33250590368	10076675245	0,100

No	Name	TAit	Ait-1	AREVit	ARECit	PPEit	DAit
45	PBRX	-97387012742	952742296102	-164492915075	-42278337400	206895788218	-0,032
46	PAFI	29899943109	581841786867	-80771462863	-10657262156	165257379240	0,134
47	RICY	-57027195784	645756810073	17171937715	355430605	173712949193	-0,038
48	BIMA	9459797506	107469136822	-41795978524	1665413882	18727586472	0,205
49	BATA	-27905858000	401900579000	58704078000	5600498000	155768155000	-0,016
50	SIMM	19566568381	80638432524	-41486018041	-6208461698	34125809284	0,417
51	KBLM	-6480179933	459110629071	-238366413433	-92049961198	238056887055	0,156
52	IKBI	-84013702411	636408514847	-783214141634	-109792477792	122525671390	0,119
53	PTSN	-94186511119	964585323095	-154931292521	14626091484	414519553409	0,026
54	ADES	-567000000	185015000000	4896000000	4051000000	104023000000	0,111
55	AISA	-13027863807	1016957755151	44022712827	61221555798	543788070615	0,100
56	AQUA	-22660300000	1003488000000	402180000000	-74656000000	358792000000	-0,248
57	CEKA	-55189485466	605545222668	-769093869636	-66608609450	187966818157	0,205
58	HMSP	781743000000	16133819000000	4291741000000	147400000000	4310194000000	0,050
59	INAF	-38432356710	964143569150	-353519864459	-26626630556	100990757228	0,049
60	INDF	-238646000000	39591309000000	-1658449000000	-464497000000	10808449000000	0,056
61	KAFF	-57862719482	1445669799639	149329280776	42923838011	402062398262	0,002
62	KDSI	-27118364091	485721853713	-118188522279	36051534768	181666181391	0,084
63	KICI	-6204322478	86218216167	-10183806426	7423210200	6377246516	-0,016
64	KLBF	-434579700263	5703832411898	1209981284171	316918572975	1398127877081	-0,057
65	LMPI	-6917893359	560078203949	54957981234	19435698527	161251671834	0,034
66	MERK	65436701000	375064492000	114268953000	87538581000	66911129000	0,197
67	MLBI	-18652200000	941389000000	290603000000	-12957000000	420864000000	-0,171
68	MRAT	18579011673	354780623962	37771592575	23013168801	64861343935	0,082
69	MYOR	-74271933376	2922998415036	869501340309	129279901496	1282771283456	0,014
70	PSDN	76791879071	286965007378	-120755490552	18189740534	117205567084	0,448

No	Name	TAit	Ait-1	ΔREVit	ΔRECit	PPEit	DAit
71	PYFA	-1247263792	98655309435	12419568844	-1909036825	54047384571	0,071
72	RMBA	-419501850860	4455531963727	140924999753	37102439967	1209997621762	-0,043
73	SCPI	16505743000	199526342000	80888092000	7621165000	35870599000	0,046
74	SKLT	1112700395	201003449401	-36813192354	-12372767911	99533575485	0,131
75	SQBI	261145000	294724871000	60756943000	4677716000	64568215000	0,008
76	STTP	-58880517800	626749784472	2713958487	-11875999289	325884194275	0,008
77	TCID	-63609877147	910789677565	148949247455	34283322826	399856238388	-0,005
78	TSPC	-116625384807	2967057055450	864141842466	91207235861	715003306406	-0,042
79	ULTJ	45464915649	1718997392028	251321410912	26884449018	808903387439	0,097
80	UNVR	-236603000000	6504736000000	2669061000000	351332000000	3035915000000	-0,012

Appendix 3: Descriptive Statistics

One-Sample Kolmogorov-Smirnov Test

		DAitdurin gcrisis
N		154
Normal Parameters ^{a,b}	Mean	.0509
	Std. Deviation	.13977
Most Extreme Differences	Absolute	.109
	Positive	.109
	Negative	-.078
Kolmogorov-Smirnov Z		1.353
Asymp. Sig. (2-tailed)		.051

a. Test distribution is Normal.

b. Calculated from data.

Appendix 4: Normality Test

Normality Test Result of Discretionary Accruals

One-Sample Kolmogorov-Smirnov Test

		DAit0809
N		160
Normal Parameters ^{a,b}	Mean	.1016
	Std. Deviation	.54692
Most Extreme Differences	Absolute	.331
	Positive	.331
	Negative	-.262
Kolmogorov-Smirnov Z		4.192
Asymp. Sig. (2-tailed)		.000

a. Test distribution is Normal.

b. Calculated from data.

Normality Test of Discretionary Accruals after Trimming

One-Sample Kolmogorov-Smirnov Test

		DAit0809
N		154
Normal Parameters ^{a,b}	Mean	.0509
	Std. Deviation	.13977
Most Extreme Differences	Absolute	.109
	Positive	.109
	Negative	-.078
Kolmogorov-Smirnov Z		1.353
Asymp. Sig. (2-tailed)		.051

a. Test distribution is Normal.

b. Calculated from data.

Appendix 5: One Sample T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
DAit0809	154	.0509	.13977	.01126

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
DAit0809	4.517	153	.000	.05088	.0286	.0731